

#### ABSTRACT OF THE DISCLOSURE

Disclosed is a method of producing hydrogen from oxygenated hydrocarbon reactants, such as glycerol, glucose, or sorbitol. The method can take place in the vapor phase or in the condensed liquid phase. The method includes the steps of reacting water and a water-soluble oxygenated hydrocarbon having at least two carbon atoms, in the presence of a metal-containing catalyst. The catalyst contains a metal selected from the group consisting of Group VIII transitional metals, alloys thereof, and mixtures thereof. The disclosed method can be run at lower temperatures than those used in the conventional steam reforming of alkanes.